

**BY ORDER OF THE  
BASE COMMANDER**



**GRAND FORKS AIR FORCE BASE  
INSTRUCTION 21-1012**

**1 JANUARY 2004**

**Maintenance**

**FOREIGN OBJECT DAMAGE (FOD)  
PREVENTION PROGRAM**

**COMPLIANCE WITH THIS PUBLICATION IS MANDATORY**

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OPR: 319 MXG/QA (MSgt Daniel J. Plets)  
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**SUMMARY OF REVISIONS**

**This document is substantially revised and must be completely reviewed.**

It assigns responsibilities and prescribes procedures for an effective FOD Prevention Program. All military, civilian, and contractor personnel assigned and/or attached to the 319<sup>th</sup> Air Refueling Wing (319 ARW) working in, on, around, or traveling through flightline areas or near aircraft, engines, and aerospace ground equipment (AGE) will comply with FOD prevention measures.

**1. References.** AFI 21-101/AMC1, *Aerospace Equipment Maintenance Management*, Chapter 18; AFJMAN 24-306, *Manual for the Wheeled Vehicle Driver*; TO 00-20-1, *Aerospace Equipment Maintenance Inspection, Documentation, Policies, and Procedures*; AFPAM 91-216, *Safety Investigations and Reports*; and AFI 91-204/AMC1, *Safety Investigations and Reports*.

**2. Responsibilities:**

- 2.1. The 319<sup>th</sup> Maintenance Group Quality Assurance (QA) FOD Monitor is the wing FOD Monitor.
- 2.2. Every unit that performs operations on or around the flight line will designate a FOD Prevention Program Manager. Commanders will make appointments in writing and forward to the wing FOD Monitor.
- 2.3. FOD Prevention Committee Meeting: Wing FOD prevention committee meetings will be conducted quarterly as long as the wing does not exceed the established preventable FOD rate. If the wing exceeds the FOD rate, meetings will be held monthly. The WG/CV chairs the meeting (MXG/CC or OG/CC may chair the meeting in the WG/CV's absence). At a minimum, group commanders, director(s), commanders of units with maintenance personnel, flight safety officer, civil engineering, air-

field manager, transportation, and security forces will attend the meetings. All FOD Prevention Program Managers and maintenance supervisors will attend quarterly FOD/Dropped Object Prevention (DOP) briefings.

2.4. All units' members are responsible for FOD control as it pertains to daily activities on or around the flight line IAW AFI 21-101, Chapter 18. Every individual will accomplish a thorough check at the completion of all maintenance activities while working around aircraft, engines, AGE, and associated work areas to remove potential FOD hazards. Maintenance production areas will have approved FOD containers readily accessible in the work place. Vehicles normally driven on the flight line will be equipped with secured and lidded FOD containers marked IAW AFI 21-101.

### 3. Procedures:

3.1. FOD Walks: Units will conduct weekly FOD walks, usually on Friday, weather permitting, as determined by the wing FOD monitor. The aircraft parking ramp and associated work areas must remain clear of foreign objects and debris that could damage aircraft engines, tires, or other equipment.

3.1.1. Areas assigned to aircraft maintenance entities are shown on the map ([Attachment 2](#)) as follows;

3.1.1.1. 319<sup>th</sup> Maintenance Squadron – Three Bay Hangars and Bravo Ramp.

3.1.1.2. 319<sup>th</sup> Aircraft Maintenance Squadron (AMXS) Knight Aircraft Maintenance Unit (AMU) – North end of Charlie Ramp.

3.1.1.3. 319 AMXS Viking AMU – South end of Charlie Ramp.

3.1.1.4. 319<sup>th</sup> Maintenance Operations Squadron – 600 series hangars' ramp area.

3.1.2. Units with facilities in close proximity to the flight line will perform weekly FOD walks around those flight line structures and associated work areas.

3.1.3. Flight line production superintendents (AMXS, MXS) or work center supervisors (other units) will supervise the FOD walk and scan the areas after completion to determine if another FOD walk is necessary.

3.1.4. To augment the effectiveness of FOD walks when paved flight line surfaces are free of snow and ice, the tow-behind "FOD Boss" unit will be utilized twice weekly on FOD walk responsibility areas. AMXS will sweep their area(s) on Mondays and Wednesdays; MXS on Tuesdays and Thursdays. MXS will perform a "FOD Boss" sweep of the 600 – series hangars ramp area on Tuesdays and Thursdays. After Friday FOD walks, the "FOD Boss" will be used in each area as a follow-on method to help insure a clean flight line.

3.1.5. Each AMXS AMU will store and maintain one "FOD Boss" as part of their consolidated tool kit (CTK). MXS will sign out a "FOD Boss" from one of the AMXS CTKs when needed. "FOD Boss" units will be issued just as any other piece of equipment and marked IAW AFI 21-101. CTK sections will perform periodic inspections IAW TO 1-1A-15.

3.1.6. MXG/QA will use the "golden bolt," placed in a FOD walk area as an incentive to members participating in weekly FOD walks. The member who finds the "golden bolt" will receive a 1 day pass. Significant contributions to the "golden bolt" program will be recognized at the quarterly FOD/DOP prevention meeting. Every base organization is encouraged to participate in weekly

FOD walks. Units not assigned a specific FOD walk area of responsibility by this GFAFBI may coordinate participation through MXG/QA not later than close of business the Wednesday prior.

3.1.7. All vehicle operators entering the flight line will stop and perform tire FOD checks at the posted areas (bldg 521, bldg 541, bldg 607, warehouse 19A, 3-bay access). Remove any debris from the vehicle tire treads and properly dispose of it in the FOD receptacles provided.

3.2. Restricted area badges will be secured with a subdued nylon/cotton cord or plastic armband. Metal insignia/badges will not be worn on the flight line. Hats/berets will not be worn on the flight line within the vicinity of operating jet engines. **Exception:** Headgear/clothing authorized for extreme cold weather protection may be worn; however, make every effort to prevent such headgear from coming loose during duty performance. Special attention to the FOD potential and safety of personnel will be prime considerations when determining extreme cold weather clothing authorizations.

3.3. Personal tools are not authorized on the flight line or any maintenance area.

3.3.1. Aircrew members must account for all equipment and personal items after flight. Any item lost in flight will be documented on the AFTO Form 781A, *Maintenance Discrepancy and Work Document*, and reported IAW MXG OI 21-2, *CTK and Lost Tool/Object Procedures*.

3.3.2. Every individual with access to the aircraft is responsible for the prevention and elimination of FOD hazards at aircraft flight stations and on the aircraft flight deck prior to flight.

3.3.3. Prior to flight, maintenance will perform an engine inlet and exhaust FOD inspection and document the requirement in the AFTO form 781A under a red "X" symbol.

3.3.4. MXG/QA and/or the wing FOD Monitor will perform periodic checks of all areas to ensure compliance with this GFAFBI. Unsatisfactory results will be routed through the respective unit(s).

3.4. FOD reporting: In the event of a suspected or confirmed FOD incident, report IAW the following procedures:

3.4.1. The production superintendent or person discovering the damage will:

3.4.1.1. Notify Maintenance Operations Center (MOC) immediately upon discovery.

3.4.1.2. Assist the 319 MXG/QA Office with completing items 1 through 13 of [Attachment 1](#) immediately.

3.4.2. Aircrews will complete AMC Form 97, *AMC Unusual Occurrence/Bird Strike Worksheet*, at the AMXS maintenance debrief section.

3.4.2.1. The debriefer will forward forms to 319 ARW/SEF, MXG/QA, and MOC.

3.4.3. Upon notification of a FOD incident, the MOC will:

3.4.3.1. Notify the MXG/CC with all available information.

3.4.3.2. Notify group QA and ARW/SEF of aircraft tail number, parking location, time of discovery, and give brief description of damage resulting from FOD incident.

3.4.3.3. Notify Command Post of FOD incident. Aircraft tail number, discovery time, and description of FOD damage.

3.4.4. The wing FOD Monitor (MXG/QA Office) will:

3.4.4.1. Conduct an investigation IAW AFI 91-204 and AFI 21-101 to determine if the inci-

dent is a preventable FOD incident and chargeable to the wing FOD rate. The results of the investigation will be briefed to the 319 MXG/CC.

3.4.4.2. Report the incident to HQ AMC/A4MJP as soon as reportable damage is known but no later than 24 hours after occurrence.

**4. Forms Prescribed:** AFTO Form 781A, *Maintenance Discrepancy and Work Document*; AMC Form 97, *AMC Unusual Occurrence/Bird Strike Worksheet*; and Initial FOD Report.

MARK F. RAMSAY, Colonel, USAF  
Commander

**Attachment 1**

**INITIAL FOD REPORT**

1. DATE/TIME OF INCIDENT: \_\_\_\_\_

2. OWNING BASE(S) AND UNIT: \_\_\_\_\_

3. MDS: \_\_\_\_\_

4. TAIL NUMBER: \_\_\_\_\_

5. WORK UNIT CODE: \_\_\_\_\_

6. ITEM/NOUN/DESCRIPTION OF DAMAGE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

7. MOST LIKELY CAUSE OF FAILURE: PERSONNEL/MATERIEL

8. ENGINE POSITION/MODEL AND SERIAL NUMBER: \_\_\_\_\_

9. AIRCRAFT TIME: \_\_\_\_\_

10. HOURS SINCE ISO: \_\_\_\_\_

11. LAST MAINTENANCE IN AREA: \_\_\_\_\_

12. OTHER PERTINENT INFORMATION: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

13. REPAIR COST OF DAMAGE: \_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Processing FOD Report

Make three copies of each report and distribute them as follows:

- 1 Copy to the FOD Monitor, Group Quality Assurance Office (X-6091/Fax 76096)
- 1 Copy to the MOC (X-6750/Fax 75930)
- 1 Copy to wing safety (X-3842/Fax 73372)

Attachment 2

FOD WALK RESPONSIBILITY AREAS

